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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/182,875	10/30/1998	MANABU HYODO	0879-0217P	2496

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EXAMINER

WHIPKEY, JASON T

ART UNIT

PAPER NUMBER

2612

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/182,875

Applicant(s)

HYODO ET AL.

Examiner

Jason T. Whipkey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 1998 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Response to Arguments

1. Applicant's request for reconsideration of the Office Action mailed on February 12, 2003, is persuasive and, therefore, said Action is vacated.

The interview with the Applicant on April 29, 2003, apprised the examiner of the Applicant's view that the cited references fail to teach the inclusion of a "principal subject determining device". Consequently, a new non-final Action follows.

2. Applicant's arguments, made in a personal interview on April 29, 2003, with respect to the rejection of claims 1-21 over Suzuki in view of Sakaegi (et al.) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made, as articulated below.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-3, 5-8, 11, 12, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (U.S. Patent No. 5,412,487) in view of Suzuki (Japanese Patent Application Publication No. 09-116792) and further in view of Zamir (U.S. Patent No. 6,300,955).

Regarding claims 1, 6, and 19, Nishimura discloses a video camera capable of extracting an object. As shown in figures 1 and 18, the camera includes imaging pickup device 1, lens 7 ("an imaging optical system"), and electronic viewfinder 117 ("a display part"). The operator frames the subject so that the marker shown in the viewfinder of Figure 2 is placed on the subject, at which point the operator presses switch 121 (column 5, lines 31-42). Extractor circuit 3 ("a principal subject determining device") extracts the designated object from the signal captured by imaging pickup device 1 and presents it to the operator for verification, as shown in Figure 4A (column 5, lines 54-67; column 6, lines 20-35). As shown in Figure 17, the captured video signal may be recorded on recording medium 902 as instructed by recording circuit 900 ("a recording instruction device") (column 14, lines 46-61).

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Nishimura is silent with regard to using a touch panel over a display part to enable an operator to select the principal subject.

Suzuki¹ discloses a video camera, as shown in Drawing 1. The camera includes a display device 6, which displays the captured image, and a touch panel 7 covering it (page 5, lines 42-46). Input position detector 24 ("a positional information acquiring device") determines the position of the touched portion of touch panel 7 (page 5, lines 18-22). As shown in Drawing 2, points P₁ and P₂ may be touched to designate an image area (page 6, lines 21-23).

When using a touch panel positioned over a display screen, a user may directly choose an area in a live image with his or her finger as opposed to using an indirect method of selection, such as moving the camera or using a joystick. This is advantageous because a more precise area may be defined by the user. For this reason, it would have been obvious at the time of invention to have Nishimura's camera include a touch panel positioned over a display screen.

Nishimura is silent with regard to recording the position of the principal subject on the recording medium.

Zamir discloses a method for generating a mask for an image. Using an input device (column 6, lines 11-17), the operator highlights the area around a subject (column 3, lines 32-36). The system adjusts the highlights to more closely match the contours of the subject (column 3, lines 32-36). The coordinates of the final highlighted

¹ All citations of Suzuki made henceforth will correspond to the computer translation provided by the Office and not the original published Japanese application.

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area are stored for later use (column 3, lines 37-45) using some sort of file-writer (column 7, lines 39-41).

An advantage to storing references to a selected area in an image is that it is unnecessary for a user to later re-designate the area when further image processing is performed at a later time. Additionally, storing the references does not require the original image to be modified. For these reasons, it would have been obvious at the time of invention to have Nishimura's camera store the coordinates of subjects defined by the operator.

Regarding claims 2 and 7, Nishimura teaches that the extracted portion of the video signal may be used to control exposure (column 16, lines 30-34).

Regarding claims 3 and 8, Nishimura teaches that the extracted portion of the video signal may be used to control focusing (column 16, lines 26-29).

Regarding claims 5 and 11, Zamir discloses that the system requires the user to designate a closed curve using the input device in order to begin the mask-generating process (column 9, lines 47-52). Since the process cannot begin without a closed curve, it is inherent that Zamir's system includes a frame detector. As shown in Figure 2, the system displays the highlighting on the screen.

Regarding claim 12, Nishimura shows in Figure 16 that an image ("a template image") previously stored in a memory of a mixing circuit 803 ("a template image storage part") may be used as a background image for an image extracted from the image captured by image pickup device 1 ("the captured image") (column 14, lines 33-45). Mixing circuit 803 ("an image composition processor") combines the two images.

Regarding claim 20, Suzuki shows in Drawing 2 that points P_1 and P_2 may be selected by a user and to designate an image area (page 6, lines 21-23). Additionally, Zamir shows in Figure 2 that highlights may be placed wherever necessary to enclose a subject.

Regarding claim 21, Nishimura is silent with regard to placing a release and/or shutter button on the display.

Suzuki teaches that an execution button SW is shown on the display under touch panel 7 to execute an image capture operation (page 6, lines 24-29). The menus shown on the screen for use in conjunction with touch panel 7 include zoom buttons (page 6, lines 1-5).

An advantage to using a touch screen to initiate recording is that it simplifies the user interface, allowing for the elimination of buttons when their presence is illogical or unavailable. For this reason, it would have been obvious at the time of invention to have the camera described by Nishimura include zoom and shutter buttons on the display for use in accordance with a touch panel.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (U.S. Patent No. 5,412,487) in view of Suzuki (Japanese Patent Application Publication No. 09-116792) and further in view of Zamir (U.S. Patent No. 6,300,955) and Maurinus (U.S. Patent No. 6,222,646).

Claim 4 may be treated like claim 1. However, Nishimura, Suzuki, and Zamir are all silent with regard to using a touch panel to request recording of a captured image.

Maurinus discloses an electronic photography system. When a captured image is displayed to a user on a touch screen CRT 58, the user may manipulate and select an image to be recorded on a magnetic or optical digital storage medium (column 3, lines 35-45).

The advantage to using a touch screen to initiate recording is that it simplifies the user interface, allowing for the elimination of a shutter button. For this reason, it would have been obvious for the systems described by Nishimura, Suzuki, and Zamir to record a captured image on a recording medium using a touch screen.

7. Claims 9, 13, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (U.S. Patent No. 5,412,487) in view of Suzuki (Japanese Patent Application Publication No. 09-116792) and further in view of Zamir (U.S. Patent No. 6,300,955) and Shiota (U.S. Patent No. 6,011,547).

Regarding claims 9 and 16, Nishimura discloses a camera as described in the rejection of claim 1. However, Nishimura is silent with regard to using a display with an image processor for correcting image tone.

Shiota discloses an image reproduction system. Images captured by digital camera 1 are transferred via image server 2 to image reproducing apparatus 3. The recorded information accompanying the images may include a designation of the main subject of the image (column 5, lines 1-7). Image reproducing apparatus 3 has a set-up processing unit 11, which processes the image according to the recorded information accompanying the images (column 5, lines 50-54). This processing may include tone or

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color correction, as defined on lines 46-50 of column 2. The final image is displayed on display interface 13.

An advantage to having a display process color tone correction is that the colors may be corrected based on the display's color reproduction characteristics, resulting in a better-adjusted display image. For this reason, it would have been obvious to have the camera described by Nishimura perform color correction in a connected display rather than in the camera.

Regarding claim 13, Nishimura discloses a camera as described in the rejection of claim 1. However, Nishimura is silent with regard to using a printer with an image processor for correcting image tone.

Shiota discloses an image reproduction system. Images captured by digital camera 1 are transferred via image server 2 to image reproducing apparatus 3. The recorded information accompanying the images may include a designation of the main subject of the image (column 5, lines 1-7). Image reproducing apparatus 3 has a set-up processing unit 11, which processes the image according to the recorded information accompanying the images (column 5, lines 50-54). This processing may include tone or color correction, as defined on lines 46-50 of column 2. The final image is printed on printer 12.

An advantage to having a printer process color tone correction is that the colors may be corrected based on the printer's known ink attributes, resulting in a better-adjusted print. For this reason, it would have been obvious to have the camera

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described by Nishimura perform color correction in a connected printer rather than in the camera.

8. Claims 10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (U.S. Patent No. 5,412,487) in view of Suzuki (Japanese Patent Application Publication No. 09-116792) and further in view of Zamir (U.S. Patent No. 6,300,955) and Hirose (U.S. Patent No. 5,838,371).

Claims 10 and 18 may be treated like claims 6 and 1, respectively. Additionally, Nishimura teaches that zooming may be performed based on the extracted portion of the video signal (column 16, lines 35-38). However, Nishimura is silent with regard to reducing an image about a reference point.

Hirose discloses a camera with variable zoom magnification. A captured image stored in field memory 25 ("a recording medium") may be reduced in addition to being enlarged (column 5, lines 15-21). Since a reduced image is comprised of the entire subject presented in an original image plus empty space surrounding it, it is inherent that image reduction occurs about *any and all* reference points in a captured image.

An advantage to performing image reduction is that two images may be combined with one inset in the other, which increases the creative flexibility available to a user. For this reason, it would have been obvious at the time of invention to have Nishimura's camera perform image reduction on its display.

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9. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (U.S. Patent No. 5,412,487) in view of Suzuki (Japanese Patent Application Publication No. 09-116792) and further in view of Zamir (U.S. Patent No. 6,300,955), Shiota (U.S. Patent No. 6,011,547), and Nagasaki (U.S. Patent No. 6,317,156).

Claim 14 may be treated like claim 13. However, Nishimura and Shiota are silent with regard to using a printer than can reduce and enlarge an image about a reference point.

Nagasaki discloses a printer and camera combination. As shown in Figure 16, the camera enlarges an area around a specific point of a source image 85 to produce an enlarged print 86. CPU 101 performs image processing and zooming (column 8, lines 18-26).

Nagasaki is silent with regard to performing an image reduction operation before printing. However, an advantage to performing a reduction operation is that an image may be produced that meets the size needs of a user. For this reason, it would have been obvious to have Nagasaki's printer reduce an image.

The advantage to having a printer print a reduced or enlarged image around a reference point the user can ensure the subject of an image remains in a print that is resized to meet his or her needs. For this reason, it would have been obvious to have Shiota's printer use its supplied main-subject designation to create a reduced or enlarged print.

Regarding claim 15, Nishimura discloses a camera as described in the rejection of claim 1. However, both Nishimura and Shiota are silent with regard to using a printer with an image processor for expanding and reducing the supplied image.

Shiota discloses an image reproduction system. Images captured by digital camera 1 are transferred via image server 2 to image reproducing apparatus 3. The recorded information accompanying the images may include a designation of the main subject of the image (column 5, lines 1-7). Image reproducing apparatus 3 has a set-up processing unit 11, which processes the image according to the recorded information accompanying the images (column 5, lines 50-54). The final image is printed on printer 12.

An advantage to having a printer perform image processing is that the processor will better adjust the image to match the attributes of the printer. For this reason, it would have been obvious to have Nishimura's camera process images to be printed in the printer.

Nishimura and Shiota are all silent with regard to printing an expanded or reduced image.

Nagasaki discloses a printer and camera combination. As shown in Figure 16, the camera enlarges an area around a specific point from a source image 85 to produce an enlarged print 86. CPU 101 performs image processing and zooming (column 8, lines 18-26).

Nagasaki is silent with regard to performing an image reduction operation before printing. However, an advantage to performing a reduction operation is that an image

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may be produced that meets the size needs of a user. For this reason, it would have been obvious to have Nagasaki's printer reduce an image.

The advantage to having a printer print a reduced or enlarged image around a reference point the user can ensure the subject of an image remains in a print that is resized to meet his or her needs. For this reason, it would have been obvious to have Shiota's printer use its supplied main-subject designation to create a reduced or enlarged print.

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura (U.S. Patent No. 5,412,487) in view of Suzuki (Japanese Patent Application Publication No. 09-116792) and further in view of Zamir (U.S. Patent No. 6,300,955), Shiota (U.S. Patent No. 6,011,547), and Hirose (U.S. Patent No. 5,838,371).

Claim 17 may be treated like claim 16. Additionally, Nishimura teaches that zooming may be performed based on the extracted portion of the video signal (column 16, lines 35-38). However, Nishimura and Shiota are silent with regard to reducing an image about a reference point.

Hirose discloses a camera with variable zoom magnification. A captured image may be reduced in addition to being enlarged (column 5, lines 15-21). Since a reduced image is comprised of the entire subject presented in an original image plus empty space surrounding it, it is inherent that image reduction occurs about *any and all* reference points in a captured image.

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An advantage to performing image reduction is that two images may be combined with one inset in the other, which increases the creative flexibility available to a user. For this reason, it would have been obvious at the time of invention to have Nishimura's camera perform image reduction on its display.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason T. Whipkey, whose telephone number is (703) 305-1819. The examiner can normally be reached Monday through Friday from 9 A.M. to 6:30 P.M. eastern daylight time, alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R. Garber, can be reached on (703) 305-4929. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communication and (703) 872-9315 for After Final communication.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (703) 306-0377.

Response to this action should be mailed to:

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or faxed to the appropriate number above for communications intended for entry. (For informal or draft communications, please label "**PROPOSED**" or "**DRAFT**".)

Hand-delivered responses should be brought to the sixth floor receptionist of Crystal Park II, 2121 Crystal Drive in Arlington, Virginia.

JTW
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May 29, 2003


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